UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/538,556	03/29/2000	Eileen C. Shapiro	1525C/107	6059

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BROMBERG & SUNSTEIN LLP
125 SUMMER STREET
BOSTON, MA 02110-1618

EXAMINER
STIMPAK, JOHNNA

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.		Applicant(s)
Office Action Summary	09/538,556		SHAPIRO ET AL.
	Examiner		Art Unit
	Johnna R Stimpak		3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 February 2004*.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17,19-22 and 25-29* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17,19-22 and 25-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   The following is a non-final office action upon examination of application number

09/538,556. Claims 1-17, 19, 20-22, and 25-29 are pending and have been examined on the

merits discussed below.

Response to Amendment/Remarks

2.   In view of the interviews that have taken place between applicant's attorney and

examiner of record, the previous rejections have been modified. While it is clear that Puram

does not explicitly teach the use of conjoint analysis in employer/candidate matching, another

reference by Singh teaches the benefit using conjoint analysis for gaining insight to preferences

for employer/candidate matching. It is also noted that the concept of gathering preferences from

separate parties and matching those similar parties is old and well known in the art. Examiner

notes that with the benefits of conjoint analysis in mind, it would have been obvious to one of

ordinary skill in the art to use the concepts of conjoint analysis to reveal the preferences in a

matching method or system.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   **Claims 1, 3, 5-13, 16, 17, 19, 22, 23, and 25-29** are rejected under 35 U.S.C. 103(a) as

being unpatentable over Puram et al, US 6,289,340 in view of the Singh article entitled,

"Matching Candidates with Job Openings Using Web-based Adaptive Conjoint Analysis".

As per **claim 1** (amended), Puram et al teaches a method for facilitating evaluation

comprising:

obtaining for each of the parties (employers) in the first class and storing in a first digital

storage medium responses from at least one of the party and a party co-evaluator to a first set of

questions designed to permit analysis of the responses in terms of a first plurality of attributes

that can be used to estimate the closeness of such party's fit with a counterparty (candidates) in

such context and obtaining for each of the counterparties in the second class and storing in a

second digital storage medium responses from at least one of the counterparty and a counterparty

co-evaluator to a second set of questions designed to permit analysis of the responses to estimate

the closeness of such counterparty's fit with a party in such context (column 2, lines 44-55,

column 3, lines 53-56 - in this reference the "employers" and "candidates" provide data

regarding the skills desired or possessed and that information is stored within a storage medium;

figures 5-9, the questions to reveal preferences are presented in a way to "force" the respondent

to answer, as opposed to an open ended format. The questions are formed so that the respondent

is lead to give specific information. In figure 5, the respondent answers specific questions about

technical skills. The respondent is "forced" to enter information such as specific hardware he or

she has worked with and the number of years working in that area, as opposed to a format

wherein the respondent is asked an open ended question such as "tell us everything about your

technical skills");

deriving from the responses to the first set of questions for each such party a first

preference profile for each such party and deriving from the responses to the second set of

questions for each such counterparty a second preference profile for each such counterparty

(column 1, lines 10-13; profiles are generated and stored for candidates and positions to be filled

(employer profile));

and in a separate computer process, analyzing the preference profiles of the party and

counterparty to generate a list of counterparties for which the preferences of the party closely

match the preferences of the counterparty and the preferences of the counterparty closely match

the preferences of the party and communicating the first list to such party (column 7, lines 6-22,

65-67).

Puram teaches a matching process wherein preference profiles are generated for job

candidates and for positions to be filled by having the employers answer questions regarding

skills needed and candidates answer questions regarding the skills they possess and the level of

those skills, but Puram does not explicitly teach the use of conjoint analysis, including forced

choice questions that are essentially orthogonal to one another and are used to reveal underlying

party preferences. However, conjoint analysis is an old and well-known method used to reveal

preferences. As taught in the Singh article, conjoint analysis is an effective tool in choosing

candidates for job openings therefore it would have been obvious to one of ordinary skill in the

art at the time of the invention to use conjoint analysis to analyze the candidates as taught in

Singh and to also use the same conjoint analysis along with the Puram method of analyzing both

employer preferences and candidate preferences to find the best fit, making sure to satisfy

preferences of both the employer and candidate. A method using conjoint analysis for both the

party and counterparty would ensure the most effective matching.

As per **claim 3**, Puram et al teaches the first list ranked according to the closeness of fit

(abstract; the candidates are ranked according to adjusted skills scores to yield best-fit matches).

As per **claims 5 and 6**, Puram et al teaches obtaining responses from each of the parties

and counterparties is accomplished using communication over a communication network

(column 3, lines 7-8).

As per **claims 7 and 8**, Puram et al teaches obtaining responses from each of the parties

and counterparties includes making web pages available providing the questions and permitting

entry by such party or counterparty of responses thereto (column 3, lines 50-58, column 5, lines

60-67).

As per **claim 9**, Puram et al teaches questions eliciting revelation of a utility value which

indicates the value that the party places on the level of the attribute (column 5, lines 60-65; the

party (employer) identifies the skills desired and indicates the priority of that skill).

As per **claim 10**, Puram et al teaches questions eliciting revelation of a utility value

which indicates the value that the counterparty places on the level of the attribute (column 5,

lines 36-42; the counterparty (candidate) indicates priority of preferred geographic region of

employment or willingness to travel).

As per **claim 11**, Puram et al teaches analyzing the preference profile of the party in

relation to the preference profiles of the counterparties using a measure of distance between a set

of utility values created with respect to the first series of attributes and a set of utility values

created for the second series of attributes (column 7, lines 6-13, 21-25, 51-69; the search only

returns those candidates whose skills profiles matches or exceeds the specified criteria).

As per **claim 12**, Puram et al teaches a set of questions requiring the party to rank each of

a non-null set of items from among a plurality of possible ranks (column 2, lines 44-49; the

employer provides data regarding the skills desired and the priority of that skill for the position).

As per **claim 13**, Puram et al teaches a set of questions requiring the counterparty to rank

each of a non-null set of items from among a plurality of possible ranks (column 5, lines 36-42;

the counterparty (candidate) inputs preference data, for example, the candidate inputs his or her

preferred geographic location).

As per **claim 16**, Puram et al teaches the preference profile of each party associates a

utility value to indicate the value which the party places on the level of the attribute (column 5,

lines 60-67, column 2, lines 44-50; the party (employer) identifies the importance or priority of

the skills desired as part of the preference data that is gathered and stored in the profile).

As per **claim 17**, Puram et al teaches the preference profile of each counterparty

associates a utility value to indicate the value which the counterparty places on each level of the

attribute (column 5, lines 35-42, column 2, lines 50-55; the counterparty (candidate) indicates

preference values for each attribute which are stored in the profile).

As per **claim 19**, Puram et al teaches a party co-evaluator is an associate of the party

(Puram teaches a third party evaluation of the candidate (column 3, lines 20-25), inherently this

evaluation would come from an associate or someone who knows the candidate, otherwise, the

third party evaluation would not be accurate)

As per **claim 22**, the same rejection as applied to claim 1 above is applied to claim 22. Claim 22 is the computer process for implementing the steps of claim 1.

As per **claim 23**, the same rejection as applied to claim 1 above is applied to claim 23. Claim 23 is a question and response module for obtaining the information claimed in claim 1. Puram et al teaches separate interfaces for collecting the profile information (column 3, lines 20-25), and also teaches storing the information in separate storage media (column 2, lines 44-55).

As per **claim 25**, the same rejection as applied to claim 1 above is applied to claim 25. In claim 25, the database is structured for storing the information obtained in claim 1. Puram et al teaches separate databases for the profile information gathered from the party (employer) and the counterparty (candidate).

As per **claim 26**, the same rejection as applied to claim 16 above is applied to claim 26. In claim 26, the information obtained in claim 16 is stored in the database of claim 25.

As per **claim 27**, the same rejection as applied to claim 17 above is applied to claim 27. In claim 27, the information obtained in claim 17 is stored in the database of claim 25.

As per **claim 28**, the same rejection as applied to claim 11 above is applied to claim 28.

As per **claim 29**, the same rejection is applied to claims 1 and 23 above as applied to claim 29. In claim 29, the database is structured for storing the information obtained in claim 1 by the question and response module in claim 23.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   **Claims 2, 4, 14, 15 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Puram et al, U.S. Patent No. 6,289,340 B1 and Singh, in further view of CareerMosaic. The following rejections are based on CareerMosaic.com. Applicant is reminded that the following rejections are based on the product of CareerMosaic.com

CareerMosaic.com web pages 1-16 were retrieved from the "Wayback Machine" (web.archive.org). The CareerMosaic.com web pages referenced were archived on April 12, 1997.

As per **claim 2**, the combination of Puram et al and Singh teaches communicating, to a party (employer), a list of counterparties (candidates) whose preference profiles closely fit with those of the parties but does not teach communicating, to a counterparty, a list of parties for which the preferences of the party closely match the preferences of the counterparty and the preferences of the counterparty closely match the preferences of the party. CareerMosaic.com offers a way for counterparties to receive a list of parties with whom their preferences match (pg 5 – a description of the CareerMosaic J.O.B.S. database, where the counterparty enters criteria important to the job search and the second list of companies (parties) that match are returned). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Puram et al and Singh to include the list presented to the counterparty as well. The motivation for doing so would be so that both the employer and candidate could make a more informed decision. For example if the counterparty was not presented with a list of matching parties, he or she may be inclined to take the first offer for a job. Whereas, if the

counterparty knew of the parties who might be contacting them, they could make a better decision on whether to take their first offer.

As per **claim 4**, the combination of Puram et al and Singh teaches the second list ranked according to the closeness of fit (abstract; the candidates are ranked according to adjusted skills scores to yield best-fit matches). Puram et al does not teach a ranked list of parties. It is old and well known in the art to rank lists to group more relevant results together. It would have been obvious to one of ordinary skill in the art at the time of the invention to generate a ranked list of matching parties as well, so both the employers and candidates could make a well-informed decision on filling and selecting a position. A real world example would be that a candidate who receives more than one offer for employment and/or interview would choose the potential employer that best appeals to the candidate. It is for this reason one would be motivated to generate a ranked list of matching parties.

As per **claim 14**, the combination of Puram et al and Singh teaches all the limitations of claim 14, as applied to claim 9 above, but does not teach the questions revealing values without explicitly asking for the values. The combination of Puram et al and Singh teaches the party assigning a desired skill level for skills such as operating systems, languages, project experience, etc. (column 6, lines 11-14). By assigning a desired skill level to those skills, it would be obvious to one of ordinary skill in the art at the time of the invention to imply that one without those skills (or one with other skills) are not needed for the position. The motivation of using this type of question is to help the counterparty to realize what type of person is being sought after for the job. If the counterparty does not have the skills given the most priority, they would know they are not qualified.

As per **claim 15**, the combination of Puram et al and Singh teaches all the limitations of

claim 15, as applied to claim 10 above, but does not teach the questions revealing values without

explicitly asking for the values. The combination of Puram et al and Singh teaches the

counterparty identifying their geographic location preference (column 5, lines 35-42). It would

be obvious to one of ordinary skill in the art at the time of the invention to imply from that

question whether or not the counterparty is willing to relocate. For example, if the candidate was

living in one state and their geographic preference was in another state, the party could imply

that the counterparty is willing to relocate. The motivation of using this type of question is to

help the party to find a counterparty to is available for a position in a certain geographic region

and if that counterparty is willing to relocate from their current location. If the position is in a

state that the counterparty is not willing to relocate to, the party would not contact that

counterparty.

As per **claim 20**, the combination of Puram et al and Singh does not explicitly teach the

counterparty co-evaluator is one of an associate, a member of a group to which the counterparty

belongs, a parent or guardian of the counterparty, an advisor to the counterparty, a relative of the

counterparty, and a friend of the counterparty. It would be inherent that there would be a

counterparty co-evaluator involved in any business transaction such as hiring a candidate (as in

the Puram reference). It is well known in general hiring practices to involve more than one

person in the hiring process. A hiring manager may set forth skills needed for the job and have

them reviewed by another person in the group such as his or her manager or the person for which

the candidate will be working. This type of practice ensures that the list of skills needed includes

everything relevant to the job opening.

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Johnna R Stimpak whose telephone number is 703-305-4566.

The examiner can normally be reached on M-F 8am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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May 12, 2004
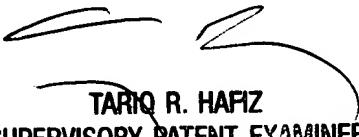
TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600